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| Closed Captioning and Video |) | MM Docket No. 95-176 |
| Description of Video Programming |) | |
| Access to Telecommunications Services, |) | WT Docket No. 96-198 |
| Telecommunications Equipment, |) | |
| and Customer Premises Equipment |) | |
| by Persons with Disabilities |) | |

REPORT
of

The National Coalition of Blind and Visually Impaired Persons
for Increased Video Access

Margaret Rockwell Pfanstiehl, Ed.D.
Coalition Chair
426 Branch Drive
Silver Spring, MD 20901-2617
Phone: 301 593 0120
Fax: 301 593 7398

Donald J. Evans, J.D.
Evans & Sill
1627 I Street NW
Washington D.C. 20006-4007
Phone 202 293 0700

Barry J. Cronin
62 Pierpont Street 6B
New York NY 11201
Phone 718 237 0538

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Report and Proposals
of
The National Coalition of Blind and Visually-Impaired Persons
For Increased Video Programming Accessibility

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INTRODUCTION

Margaret R. Pfanziehl, Ed.D

Donald J. Evans

In its Report in MM Docket No. 95-176, issued last summer, the Commission responded to a Congressional mandate to study the advisability and prospects of making video programming accessible to the blind and visually-impaired. The Commission was required to "assess appropriate methods and schedules for phasing video descriptions into the marketplace, technical and quality standards for video descriptions, a definition for programming for which video descriptions would apply, and other technical and legal issues that the Commission deems appropriate." 47 U.S.C. Sec. 713 (f).

The Commission's Report in large measure declared itself at a loss to propose any of the methods, schedules, standards or definitions that Congress sought. Rather, the Commission invited members of the blind community and affected video providers to submit further information as a basis for the next step toward implementation of video description in this country. Report at Para. 24.

In the months since the Report was issued, the visually impaired and blind community has recognized the need to develop specific proposals which are both practical and acceptable to the broad spectrum of people and organizations involved. To this end, a Coalition of seventeen leading organizations of and for the blind and senior citizens was formed. The Coalition, acting under the chairmanship of Dr. Margaret Pfanziehl (an Emmy award winner for her pioneering work in the video description field), has elicited comments, support and suggestions of the blind community. The 17 organizations in the Coalition are listed in the Appendix. Together, these entities represent millions of blind and visually impaired persons, as well as the family members and others who live and work with them.

The urgency for action here in the United States has been underscored by recent developments in the United Kingdom. There legislation has been adopted mandating video description on a phased-in, common sense basis similar to the plan outlined below. Although the television delivery system in the U.K. differs in some technical respects from that employed here, the British model serves as a powerful reminder that the technical and financial cavils which have delayed the broader availability of described programming in this country can be overcome. The United States should not fall behind other industrialized nations in delivering the most basic information services to its people.

In addition to incorporating a broad range of views from the blind community on the specifics of implementing description on a broad scale, the Coalition has also reached out to key segments of the video production and delivery industry, including major feature film and television

producers, home video distributors, public broadcasting entities, and non-traditional wired video distributors such as local exchange carriers. The objective was to take into account the practical and technical difficulties involved in making wide-spread delivery of described programming a reality. While we cannot report that we have achieved consensus with Hollywood on mandating described programming, useful meetings have been held which have at least helped each side to understand the problems and concerns of the other. In formulating the proposals set forth below, the Coalition has taken into account these discussions.

At a minimum, we believe that there is now a universal agreement that described programming is desired and needed by a segment of the American public that is anywhere from 10 to 25 million people strong, a segment which to date has been denied full access to the most dominant medium in American culture. The remaining question is how and under what circumstances that access should be ensured. For the moment, Congress has left it to the FCC to develop an implementing plan to accomplish that goal. The following proposals represent concrete steps which can be taken immediately to that end:

1. Described programming must be mandated for all video delivery systems over which the FCC has jurisdiction (broadcasting, cable, open video systems, MMDS, DBS, and any other delivery systems through which video is mass-distributed).
2. The mandatory provision of described programs must be phased in on a reasonable seven year schedule that takes into account both the present and projected capacity to produce described versions of programs and the high priority need for described programming for children.
3. Existing statutory and regulatory guidelines for undue burden would be utilized to exempt appropriate categories of video programs from mandatory description.
4. An audible signal should be mandated to alert blind members of the video audience to critical public health and safety bulletins which are now presented only in video format.
5. The quality of video descriptions must be maintained so that the benefits of described programming are not lost through shoddy or inadequate descriptions which meet the letter of the law but fail to illuminate.
6. Issues regarding the technical facilities needed to distribute described video must be resolved.

The basis for each of these proposals will be set forth in greater detail below. The attached Appendix includes biographical information on the authors of this Proposal, a list of the

participating Coalition members and information regarding the mandatory description program which has been initiated in the United Kingdom.

A. A Short History of Video Description

Video description (sometimes also referred to as audio description) refers to a means of making television, movies (particularly on home video), and other video programming accessible to people who are blind or visually impaired. It consists of verbal (audio) descriptions of key visual elements which are inserted into natural pauses in the program's dialogue, without interfering with the original audio of a program or movie. The narration enhances understanding and enjoyment of a video program by providing verbal descriptions of essential visual elements such as settings, action, comparative size, gestures, body language, scene changes, graphics, subtitles, and costumes. The verbal descriptions are permanently encoded and can be delivered as a separate audio component interspersed within pauses in the program's dialogue. To receive video described PBS programs on television, a viewer must have a stereo TV or a stereo VCR that includes the Second Audio Program (SAP) feature, standard on most newer stereo televisions and video cassette recorders. Inexpensive receivers that allow the SAP channel to be heard can also be purchased. The process is entirely invisible to viewers who do not choose to monitor the aural supplement.

The ancestor of what we now know as video description was born in 1981 when The Metropolitan Washington Ear, a radio reading service for the blind which operates in the Washington, DC area, developed "audio description" in connection with theatrical productions at Arena Stage and then other theaters in the Washington area. The FCC was extremely helpful in getting that initial service off the ground since experimental authority was needed to transmit the descriptions to special receivers worn by blind members of the theater audience. With the Commission's timely cooperation, that single project became the model for described theater and opera productions in scores of cities and literally hundreds of stage theaters across the Untied States. Until the audio descriptions were actually made available to audiences of blind and visually impaired persons, very few suspected the degree to which such a service was essential to full access to the living theater. The creators of the concept were surprised at the degree to which people who are not legally blind but who have difficulty seeing also have been able to make very effective use of the service.

The description of pre-produced video material became a reality on a very limited basis in 1982. Described television began regularly scheduled service in 1988. Yet after nine years there are only seven weekly described series on PBS and a few classic movies and classic series are available each week on the Nostalgia and Turner cable networks. Commercial broadcast networks provide no access at all. WGBH Educational Foundation, one of the principal

providers of video description services, began exploring the technique in 1985. It created Descriptive Video Service (DVS) in 1988. DVS was launched nationally in 1990. DVS is carried by 139 PBS stations reaching 75% of U.S. households. DVS Home Video, started in 1991 with funding from the U.S. Department of Education, now has 145 titles.¹

With the exception of the above, there has been no progress as a result of voluntary efforts. Description access remains only a sample service.

Video description did not flourish as did closed captioning because the Federal government did not fund start-up costs and does not continue annual contributions to the extent allotted to closed captioning. Closed captioning was launched with \$7 to \$8 million and now receives some \$13 million annually compared to video description's \$850,000 for starters and \$1.5 million annually. We believe that only mandatory description (as with mandatory closed captioning) will guarantee increased access for people who have little or no vision. This would prime the pump for video description for the waiting market of millions.

The most natural and most economical way for described versions of video productions to be created is at the source. It has generally been agreed that a described track for a video program can be produced for about \$2,000 - \$4,000 per program hour. To date, most described programming has been created as a post-production process in which the description is added on to what was already a finished product. We anticipate that eventually the addition of the video description will become part of the normal post-production process of making a film or television show, much like the credits. In the overall budget of a feature film or television program (which normally reaches well into the millions of dollars), the cost of video description will be in the noise level, a budget item ranking next to coffee and sandwiches for the crew. In this context, the cost of describing newly produced works is virtually negligible.

While the FCC has no direct jurisdiction over program producers, we anticipate that the mandates we propose here will be indirectly imposed on the producers by the downstream entities who would be required to describe the programs they distribute. Thus, for example, if broadcast television stations are required to transmit a certain percentage of their programs with description, the networks who order the production of the programs will simply require the program producers to deliver them with video descriptions included. The producers will have no direct mandate to produce described features, but since their prime target market will demand this service, it will be provided voluntarily in order to meet the demands of the market. The process would be similar to the production of "edited for television" versions of motion pictures: the producers recognize that the decency restrictions applicable to television broadcasts are different from those applicable to theatrical releases. In order to avoid being frozen out of the secondary

¹The United Kingdom has recently legislated a mandatory program for video description for 10% of the programming broadcast in the U.K. See attached information.

television market, therefore, movie producers gladly produce an edited version which meets broadcast television standards. The exact same process is likely to work here, to the benefit of all.

Of course, once the described version of a program is created, it will be available for all purposes - home video release, cable, even perhaps theatrical screenings using equipment similar to that used now for audio description of live dramatic productions. The process first initiated 15 years ago in a single theater in Washington, D.C. will then have come full circle, sweeping the video world into its embrace along the way.

B. Mandates Are Necessary

Over the last year and a half, representatives of the Coalition have had a number of meetings, under the auspices of MPAA, with members of the Hollywood video production community. While the video producers have generally been sympathetic to the circumstances of the blind and visually impaired, they have, for the most part, been unwilling to commit themselves to add descriptions to their features. The problem seems to be that the blind and visually impaired are largely an invisible market. Our needs, our numbers and our buying power go largely unrecognized because we do not fit into any easily segregable market niche. Because the market for described video programming is difficult to measure, the producers are unwilling to commit even the relatively tiny amounts of capital needed to describe new motion picture and television shows. We therefore view the imposition of mandates as a necessary priming of the pump.

As with anti-discrimination laws, environmental laws, and energy conservation laws, a mandate which was imposed because it was good later came to be recognized as good business as well. As noted above, no one suspected how many people who are not blind but who simply have difficulty seeing would benefit by described theatrical productions. As the American population ages, we anticipate that there will many millions of people who are sighted in the technical sense but who will want and need described programming as their vision deteriorates. In order to get to that point, however, it is essential that the Commission use its authority to require video description.

1. Need for Commission Action. In the Telecommunications Act of 1996, Congress chose not to mandate the provision of video description itself but rather to leave the matter to the discretion of the Commission. As the Commission noted in its Report, however, Congress stated that its goal in enacting Section 713 of the Act was "to ensure that all Americans ultimately have access to video programs and services." H.R. Conf. Report 104-458 (1996) at 183. (Emph. added). The marketplace has adopted a wait and see approach, and if that approach is tolerated, video programming access may never become a reality. True accessibility of video programming to the blind, therefore, cannot be ensured by anything less than a strong federal mandate.

2. Basis for FCC Mandate. The authority for FCC action in this field is found in the most fundamental well-springs of the mandate issued by Congress in 1934. The very purpose of the creation of the Commission was "to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service..." 47 U.S.C. 151 (Emph. add). The Commission and the Courts have returned again and again to this basic mandate when examining the Commission's role in cable television regulation² and other services.³ Not only the Communications Act, but the Americans with Disabilities Act ("ADA") charges the Commission with responsibility for ending discrimination. As the Commission stated, "The ADA's purpose is to provide a clear national mandate for the elimination or discrimination against individuals with disabilities and to ensure that federal entities such as [the] Commission play a central role in enforcing the standards established in the ADA on behalf of individuals with disabilities." In the Matter of Telecommunications Services for Individuals with Hearing and Speech Disabilities and the Americans with Disabilities Act of 1990, 56 FR 36729 (1991). This charge embraces all of the Commission's regulatory activities, but radio facilities licensed by the Commission are also subject to the "public interest" standard; this represents an independent basis for Commission action. 47 U.S.C. Section 309.

(a) Broadcasting. The Commission's authority to require broadcast licensees to transmit described programming can be approached from several different perspectives. First, as we have noted, the licensing of broadcast stations is subject to the public interest standard. The Commission could, and should, specifically find that it is the policy of the United States that video media should be fully accessible to all persons. Such a finding would be consistent not only with the purpose expressed specifically in the legislative history of Section 713 of the 1996 Telecom Act, *supra*, but also in the national purpose expressed in the ADA and affirmed by the Commission many times since Community Television of Southern California v. Gottfried, 459 U.S. 498, 53 RR2d 271 (1983). As was stated in Gottfried, "... [The public interest would be served by making television broadcasting more available and more understandable to the substantial portion of our population that is handicapped..." *Id.* at 276.

Since video description is necessary to make TV fully accessible to the blind, the Commission could follow the Children's Television model of encouraged but not mandated programming; it would ordain that broadcasters who meet the timetable set forth below for minimum described programming will be afforded a safe harbor at renewal time. This approach maximizes the discretion of broadcasters but is less satisfactory from the standpoint of the visually impaired since it does not ensure that described programming will be provided.

²See e.g., United States v. Southwestern Cable Co., 392 U.S. 157 (1968); United States v. Midwest Video Corp., 406 U.S. 649 (1972); Allied Video Transmission Corp.

³For Example, Common Carrier. See, Amendment of Section 64.702, Second Computer Inquiry, 44 FR 39513 (1979).

A second, more direct, approach would be to adopt a definition of "broadcasting" which explicitly embraces service to the visually impaired. By its very nature, a "broadcast" service implies and requires service which is generally accessible to the populace at large. Systematic exclusion of a sizeable segment of the American public by not describing the programming is not broadcasting in the truest sense. Because a broadcast license is issued for the purpose of broadcasting, a licensee would have to meet the Commission's definition of broadcasting in order to be using its license in compliance with the broadcast rules. The Commission could simply define television broadcasting to include the transmission of sufficient aural information to make the visual elements of broadcast programming accessible to the visually impaired. Regulations phasing in the description mandate, identifying exclusions, etc. would clarify the extent of this broadcast obligation.

(b) Non-broadcast radio licensees Under the public interest standard identified above, all radio licensees could also be directed to require that video programming ultimately intended for reception by the public be described. This would sweep DBS licensees, cable operators who license their headends and CARS facilities, MMDS and LMDS operators, in to the Commission's jurisdictional net.

(c) Non-radio video distributors The case for Commission authority over non-radio segments of the communications world is found in two distinct sources. First, there is precedent in the Commission's regulatory authority over cable television. It will be recalled that the Commission's authority to regulate cable TV was challenged in the early '60s. The Supreme Court ultimately sustained the Commission's jurisdiction under the rubric of United States v. Southwestern Cable Co., 392 U.S. 157 (1968). That case presumed that the Commission had no radio licensing authority over cable but the Court found jurisdiction nevertheless. This authority has formed the basis for the Commission's imposition of EEO, public access, must-carry, and fairness obligations on non-cable entities, all predicated on the Commission's "obligation of providing a widely dispersed radio and television service,"¹ with a "fair, efficient, and equitable distribution" of service. 47 USC § 307(b).

Section 255 of the Telecom Act of 1996 squarely imposes an obligation on all providers of telecommunications services to make their services accessible to the disabled. "Telecommunications services" are the offering of telecommunications for a fee directly to the public, regardless of the facilities used." 47 U.S.C. Section 153(46). This definition is clearly broad enough to encompass cable television operators, video on demand providers, and even

¹Rep No. 923, 86th Cong., 1st Sess.

common carriers which transmit video programming for distribution by broadcasters.⁵ Video on demand offered by telephone companies will be an especially important source of described video material because it eliminates the need to travel to and from a video store -- often an obstacle for the visually impaired. Given a finding of a broad public interest in making video programming accessible to the blind, the Commission should have no difficulty asserting its authority to mandate described programming over all mass media video distributors who are otherwise subject to its jurisdiction.⁶

C. Phase-In of Requirement Over Reasonable Seven Year Timeframe

a. Primetime. One of the key issues which must be addressed in connection with mandatory descriptions is the schedule within which such descriptions would have to be provided. While there are some differences in the complexity of effort required to describe a program (as opposed to closed-captioning it), we believe that the implementation timeframe applicable to closed captioning presents a useful model for this service as well. It took about eight years for all prime-time⁷ television programming to be closed-captioned. We therefore propose that video description of prime-time programming be phased in over a seven year period. Commencing no later than the fall of 1998, broadcasters would be required to have at least four hours a week of described primetime programming. An additional three hours a week should be added each year for six years until all 22 hours of primetime (excluding live news broadcasts) are described. Of course, once a program has been described, there is no additional cost or burden involved in airing the described version in subsequent non-primetime showings or in syndication. Hence, any such airings of a previously described program would have to be in the described format. Similarly, the Commission should require all new "A" titles in a video-on-demand library to be described, while a minimum of 100 older titles in the video library should be added per year. We believe these modest additions to the current pool of described programs are well within the capacity of the describers, distributors and programmers to absorb.

⁵A copy of this report is being submitted for inclusion in WT Docket No. 96-198, a notice of inquiry in which the Commission is considering the scope of its obligations and various telecommunications service providers' obligations under this Section of the Act., 16 R.R.2d 234 (1969).

⁶We note in passing that some commentators have argued that mandatory described programming raises First Amendment issues. Given that a mandatory description requirement would not dictate the content of the material but only the manner in which it is presented, we perceive no obstacle on this ground. See Ward v. Rock Against Racism, 491 U.S. 781 (1989).

⁷ Prime-time is 8 p.m. to 11 p.m. ET daily, 7 p.m. to 11 p.m. Sunday

described programs are well within the capacity of the describers, distributors and programmers to absorb.

b. Children's Programming. In addition to primetime programs, we believe that children's programming should carry a very high priority for description. This priority is consistent with recent Congressional and Commission policy statements in the field of Children's Television.⁸ We therefore propose that within two years television broadcasters should provide the three hours per week also beginning in 1998 of educational children's programming now contemplated by the rules on a described basis.

c. Additional Programming. Once the infrastructure for video description is fully functional and the value of the service is appreciated, we anticipate that a strong demand for description of non-primetime programs will develop as well. We recommend that the Commission defer for two to three years a determination as to what other categories of programming should bear the highest priorities for description. After the initial 2-3 year period, as description services are more established and greater audience feedback is available, it will be more practical to make priority choices. The communications field is changing so rapidly that at this time we do not exempt any classification from being described.

Some programs require more description than others. However even a very few descriptive words can make all the difference between confusion and understanding. Accordingly to a study by the AFB funded by the U.S. Department of Education, drama, documentaries, mysteries, nature and science programs have the highest priorities even when they are not aired during prime time. This is not surprising, these are heavily dependent on visual elements not accessible to low vision and blind people. Because drama programs are important candidates for description, there may, for example, be early requests for described day time soap operas. Many older visually impaired and retired people mostly confined to their homes are fans of the soaps.

We recognize that describing live shows presents more of a challenge than describing prerecorded programs. This is particularly true of news and sports events.

Sports events have a lower priority because they are often available over radio where they are narrated for everyone. But there are notable exceptions in live programming such as the inauguration of the president (successfully described in 1993 and 1997) and the Olympics (although a great many prerecorded segments could easily be described). While recognizing the challenges of live programs, we do not view it as necessary to exempt this program category for now, since live events have been successfully broadcast with descriptions.

⁸See e.g., Children's Television Report and Policy Statement, 50 FCC 2d 1 (1974), aff'd Action for Children's Television v. FCC, 564 F.2d 458(D.C. Cir. 1977); Policies and Rules Concerning Children's Television Programming, FCC 96-335, 3 CR 1385 (1996).

In making the determination of which programs outside of primetime and children's programming must be described, it would be appropriate for the Commission to take into account the undue burden that might be occasioned by describing categories of programming whose nature or financing would not justify producing a described version. In order to develop a consistent standard in this area, we would suggest that the Commission use the "undue burden" criteria established by Congress for closed captioning. 47 U.S.C. Section 713 (e).

D. Public Safety Messages

The use of print messages on the TV screen to alert viewers to serious public health or safety situations is a matter of critical concern. These bulletins are typically scrolled across the video screen without any aural indicator that a weather emergency or other dire circumstance is in progress. These are totally inaccessible to low vision and blind people who then cannot learn about important or vital information. An aural tone should be required to accompany the print messages to alert blind or visually impaired people to go to a radio, or turn on the SAP or a designated digital channel where the messages are spoken. Sighted viewers who do not happen to be looking at the screen would also benefit from the service.

E. Analog vs. Digital

One of the issues that was addressed in the comments in MM Docket 95-176 was whether video description should await the advent of digital television or be implemented immediately. The technical section discusses these issues in more detail. Since many people in the television field believe that it could be at least five years before the commercial networks have converted to digital systems, we strongly believe that the low vision and blind audience should not have to wait for described programming until this occurs.

Perhaps the networks could be motivated to make the switch sooner if there were a positive incentive coupled with the requirement to begin carrying described programs. Also, PBS has the capacity (for a fee) to become an interim technical provider by transmitting programs in digital form to commercial network affiliates. Local television stations, if they have converters, can air analog versions of programs originally received in digital form until they become digitally equipped. During the interim before networks and/or local stations have completed the transition to digital the SAP channel should continue to be the standard for transmitting descriptions.

Description accessibility via the SAP channel must expand as quickly as possible, be it digital or analog or both. Low vision and blind consumers and their families hope that their local stations will continue to air programs in analog for at least the next several years so they won't immediately have to purchase expensive new television sets to hear description.

F. Copyright Issues

Under the regulatory scheme we propose here, we anticipate no difficulties with copyright protections of the original rights holders in the works to be described. To date, copyright holders have been more than willing to permit description to be added to their works since they continue to own the copyright on the described version of the work and the description adds value to the work. We would expect that in the future copyright holders will continue to want to make their works accessible to the blind and, since their prime market will require descriptions to be added, any profitable licensing of broadcast or other use of non-described programming will be impaired. Thus, the market itself will serve to authorize appropriate copyright permissions.

G. Quality of Descriptions

Though descriptions are derivatives of the original programs, unfortunately there is wide scope for creating poor descriptions even if the programs themselves are excellent. There are legitimate differences of opinion as to whether a description is poor or good. But there are also generally accepted basic criteria to measure the effectiveness of any description.

Good writing includes good editing. This is certainly true for descriptions. Editing costs money. When descriptions are required in greater volume than today, and when they are produced by new organizations which will spring up as business becomes available, there will be great temptation to economize by accepting hastily written, inadequate and ineffective work.

This can result in long silent intervals with little or no descriptions, impoverished vocabulary, repetitive and cliché phrases, and inaccurate or no identification of settings, objects, costumes, etc. Also, descriptions may be narrated by an unclear voice or in a monotonous monotone. Or a narrator might constantly step on program dialog.

Low vision and blind individuals would probably have little effect if they complain to program producers who may well say that if people don't like the descriptions they don't have to listen to them.

In a parallel situation the deaf community is concerned about poor quality captioning. This is among many tough questions to solve. However, objective criteria can be crafted.

We hope that producers and distributors will want their descriptions to match the quality of their productions. Perhaps the FCC might encourage the private sector to create an advisory body — a group of fixed-term qualified knowledgeable blind and low vision consumers and professional consultants from established description producing organizations. The group would set minimum standards, maintain a list of description providers of acceptable quality and endeavor to improve the work of others.

TECHNICAL ISSUES

Barry J. Cronin

Since video description is currently being delivered to consumers on broadcast television, through satellite, and on cable, it can be said that there really are no barriers to the delivery of video description to consumers. Rather, current and emerging technologies (digital television) offer better opportunities for video description to expand coverage and increase ease of accessibility, (along with providing a host of other new services such as foreign language tracks, local weather and traffic updates, etc.)

In almost every instance, broadcasters, network administrators, and producers have cited the technology or lack thereof, as a reason for not delivering or carrying video description. But in every case, the issue was cost of delivery, not the lack of technological solutions. It is also clear that the cost of technology declines with widespread use. It is reasonable to expect then, that the costs of delivering and distributing video description will decline rather than increase regardless of the technology in use.

When referring to the technical issues of video description, discussion must be divided into two distinct areas: transmission and reception, and in-plant routing and distribution. Both areas are critical to the ultimate delivery of described programming but they represent distinctly separate technical issues and solutions.

The following discussion addresses the current and potential technologies by which video description can be delivered to consumers and distributed "in-plant."

A. Issues Related to Transmission and Reception of Video Description

Currently, there are two major methods of delivering video description to consumers: SAP and Open Description. A third method, a radio-only version, does not include the video pictures which are important for partially sighted audiences, and so is not true video description.

The SAP Channel. PBS and Turner Classic Movies currently distribute described programming over the SAP channel of the MTS system. All stereo television receivers 13" or greater and most stereo VCRs can receive the SAP channel. As new stereo televisions penetrate the consumer market, this technology emerges as a reasonable choice for delivering described programs to consumers.

The major *pros* to the use of the SAP channel include:

Readily available consumer technology

Expanding local and network capability to handle the SAP signal

The major *cons* that inhibit the use of SAP for video description include:

Only one SAP channel is available per broadcast channel at present, broadcasters must choose which service (such as Spanish soundtracks, Video description, Director's Notes, Traffic Reports, etc.) to run.

At this time a limited number of local stations are equipped to transmit SAP, although this is changing.

We Recommend the following:

The growing base of television receivers capable of receiving SAP along with the increasing ability of stations to transmit at least stereo, if not SAP, provide the basis for mandating that video description be made available on a rapidly increasing scale. There is no sound reason to wait for new, digital, technology.

PBS and others have demonstrated that SAP encoded description can be transmitted to stations via current satellite-based systems.

Local station investments in SAP inserters are relatively inexpensive (\$600 - \$1200), existing, "off-the-shelf" equipment. At least for delivery of national programming, stations need to make minimal investments in the technology.

Open Description. This requires no special receiver technology and is currently being employed by the Narrative Television Network through the Nostalgia and other cable channels. This service has gained acceptance in spite of the fact that the descriptions are heard by all viewers. Open descriptions are also used for home video distribution of current Hollywood movies.

The major *pros* for this service include:

No investment in technology is required either by sender or receiver

Video Description reaches wider audiences including elderly, low vision people and broadens the potential of the service by exposing it to non-visually impaired audiences.

The major *con* for this service include:

Everyone must listen to the descriptions; it is not selectable as needed.

We Recommend the following:

Lack of ability to turn descriptions on or off is a serious drawback and should not be mandated.

- Use of open descriptions, however, is an inexpensive alternative which should be encouraged. Particularly in cable and other services that regularly repeat programming. A

percentage of that repeat programming with open descriptions is likely to attract new audiences rather than diminish existing numbers of viewers.

Simultaneous Radio. Some blind and visually impaired people in large communities have access to Radio Reading Services which provide daily readings of local and national newspapers and magazines. These services utilize FM subcarriers to deliver their signal to special receivers. Some Radio Reading Services broadcast only the audio portion of described TV programs.

This employs an existing network designed specifically to serve the needs of blind and visually impaired people and is inexpensive to distribute and transmit.

However, the description may not be transmitted simultaneously with the television broadcast or cablecast. This, in turn, excludes any benefits that description provides for low vision people as well as opportunities for family viewing where the viewing audience contains both sighted and blind people. Also, this pre-empts normal radio reading service programming. As described television programming increases or when more than one described program is available at the same time, radio reading services may not be able to provide simultaneous or even delayed broadcast of described program audio.

Finally, radio reading services are not growing, particularly as new technologies are emerging (text to speech, dial-in, etc.) to provide access to print.

The use of such services ~~cannot be considered a viable delivery system~~ for video description.

B. Issues Related to In-Plant Routing and Distribution

This section discusses issues related to the distribution of a described audio track within the network or program master control center, its transmission to affiliate stations and cable headends, and its routing and distribution at the local level prior to transmission to the consumer.

Encoding. Typically, a video description track is encoded in the master control facility that holds the broadcast master videotape. To encode video description, unlike closed captioning, the mixed program and description soundtrack must be laid down on an available audio track on the program master tape. Current professional videotape equipment provides bandwidth for two audio tracks and a time-code track. In order to preserve the regular program audio in stereo, the description track must replace the track normally used for time-code. PBS has been using this system successfully for five years or more and has reported no transmission related problems.

It is a proven technique. Time-code is not needed for broadcast. It uses existing technology. No special encoding equipment is needed.

However, time-code is wiped out. If the program master requires editing, the description track is lost and must be re-encoded. The description track is not tied to time-code and must be synchronized at the beginning of each encoding session. It is time consuming and not automatic. As discussed, the system works and can be utilized by any program supplier (network, master control, etc.) with appropriate scheduling and plan as evidenced by PBS's continued use of the technique. In the current analog-based video system, other encoding methods can be utilized, including routing systems that can regenerate time-code on the fly thereby preserving the videotape's ability to be easily edited when necessary. Re-encoding does not require new or specialized equipment. Once encoded, the videotape can be readily duplicated.

In-Plant Routing. Once a master videotape is prepared for broadcast, encoded with closed captioning data and video description track it must be able to be routed electronically throughout a master control suite. In the past, networks particularly, have indicated that the costs of adding sufficient audio lines to handle the distribution of a single, additional soundtrack would be prohibitive. This negative response was based more on cost than the need for any new technical solutions. Additional audio lines are standard and easily implemented at a much reduced cost when an entire plant is being upgraded. At the time the networks surfaced this issue, 1990 the networks and other distribution facilities had not upgraded to stereo. Six years later has seen significant increase in stereo capability and plant capacity, especially as these facilities upgrade to digital routing for inhouse distribution only. You see this imprint every evening when you see the logo promoting stereo.

It is reasonable to expect that the additional capabilities are now in place at least at the major network operations centers. Local stations may lag behind but do not represent sufficient reason to delay the wider introduction of video description on television.

Satellite Distribution. Distribution of programming to local stations and/or cable MSO's is typically and almost universally done via satellite. Current satellite systems may have some limitations on bandwidth limiting the amount of additional audio information that may be transmitted with a program. It is unlikely that these limitations would affect the distribution of one additional soundtrack such as video description or Spanish. Only when a program supplier wishes to distribute both Spanish and Video description would this limitation emerge. In cases where this may be true, multiple feeds of the program would resolve the bottleneck until sufficient bandwidth on both videotape and satellite transponders was available.

Since current technologies permit only one additional (or SAP) channel of audio beyond stereo, multiple satellite feeds of the program would be necessary. Again, this is not a technological issues so much as a cost issue. There simply is not technological impediment to the transmission of a third audio track.

C. Issues Related to the Future of Television Broadcast and Distribution

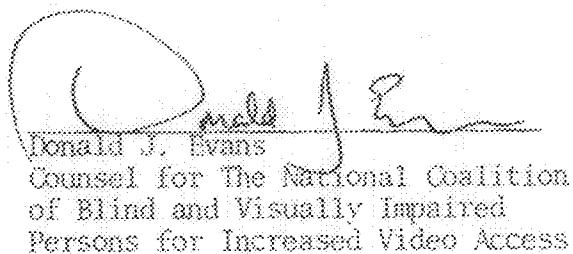
The FCC's recent approval of a Digital Television Standard moves up the timetable for the implementation of a new television system. Reports indicate that new receivers and digital transmissions could begin as early as 1998. A number of broadcasters and program providers had urged that the FCC wait until digital television is approved before addressing video description requirements, citing the increased capability of that standard to carry multiple soundtracks as well as other information services.

That time has now arrived. While there are currently no real barriers to the implementation of video description, Digital Television standards now make it imperative that the FCC act now to insure that space is reserved for this service.

The phase-in of described programming should begin as soon as possible to begin to build up an inventory of accessible programming regardless of the issues, analog or digital.

This discussion of the technical issues related to the implementation of Video description has been drawn from numerous documents and comments *already filed* with the Federal Communications Commission (MM Docket No. 95-176 FCC 95-484).

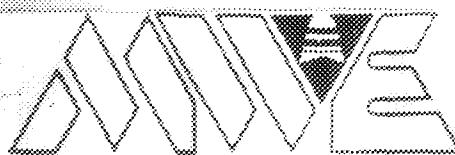
Respectfully submitted,



Monala J. Evans
Counsel for The National Coalition
of Blind and Visually Impaired
Persons for Increased Video Access

Evans & Sill, P.C.
1627 Eye Street, N.W., #810
Washington, D.C. 20006
(202) 293-0700

February 10, 1997



THE METROPOLITAN WASHINGTON EAR, INC.

A radio reading service for the blind and physically handicapped

A non-profit corporation

Margaret Rockwell Pfansiehl, Ed.D.
President

MARGARET ROCKWELL PFANSTIEHL, Ed.D.

Dr. Margaret Rockwell Pfansiehl is a pioneer and innovator in creating accessibility to printed materials, theater and television productions, museums and exhibits for blind and low vision individuals.

She is the founder and president of The Metropolitan Washington Ear, the radio and telephone reading service for blind, visually limited and physically handicapped persons in Washington D.C., Virginia and Maryland.

In 1991 she created the first telephone dial-in newspaper and magazine service in the eastern U.S. The free service enables blind and low vision people throughout Maryland, Virginia and the D.C. to browse -- to skip and scan -- through selected daily newspapers and magazines from any telephones any time of the day or night.

In 1990 the National Academy of Television Arts and Sciences awarded her an Emmy for "Leadership and persistence in the development and implementation of television for the visually impaired".

In 1985 the Washington D.C. theater community honored her with the first Helen Hayes Humanitarian Award for making live theater accessible to visually limited patrons.

Also in 1985 she was the first to produce an atlas in braille, raised line, and large type accompanied by audio commentary on cassettes. It is the first such atlas of an entire state -- Maryland.

The Washingtonian Magazine named Dr. Pfansiehl a "Washingtonian of the year" for 1982.

Reading print for the visually handicapped

Dr. Pfansiehl established the non-profit Metropolitan Washington Ear radio reading service in 1974. The first in the National Capital area and the fifth such service in the world, it operates 24 hours a day.

(MORE)

For blind, visually limited and handicapped people who can not effectively read print, volunteers, drawn from a pool of 350, read daily and weekly newspapers for the closed-circuit radio station and the telephone dial-in newspaper and magazine service. The radio service also includes excerpts from 100 magazines, and the full texts of best-selling books. It provides pre-tuned receivers without charge to eligible listeners in homes, hospitals, and institutions.

All services of the Metropolitan Washington Ear are free to eligible users. The non-profit organization is supported by contributions from local governments, private grants and gifts.

Audio description for low-vision theater patrons

In 1981 with Cody Pfanstiehl she founded the Metropolitan Washington Ear Audio Description Service. During theatrical performances in the area's major theaters trained volunteers describe stage scenery, lighting, costumes, body language and actions through a tiny radio earpiece to visually limited patrons seated anywhere in the audience.

The idea has spread world-wide. Described performances are available at theaters in many U.S. cities as well as in Australia, England, Scotland and France. She and her husband train describers in the art of audio description throughout the world.

Audio description for television

In 1982 the Pfanstiehls began to pioneer audio description for television. They trained volunteers to describe two Public Broadcasting Service (PBS) television program series to create the first TV programs accessible to low vision and blind "viewers".

In 1988, under contract to WGBH in Boston, the Pfanstiehls added descriptions to sound tracks of the "American Playhouse" series on PBS. In January 1990 they trained the first describers at the new WGBH Descriptive Video Service (DVS) for regular production of described TV programs on PBS.

Audio description for museums

In 1986 she and her husband began to apply the audio description concept to museums and exhibits to make them accessible to visually limited and blind visitors. The Pfanstiehls have trained staff and docents in the art of audio description and/or produced tape cassettes for many venues including the National Park Service, the Statue of Liberty, Castle Clinton and Ellis Island.

(MORE)

Audio description for films

In 1990 the Pfansiehls were first to make big-screen IMAX and OMNIMAX films and National Park Service films accessible to visually impaired audiences.

First tactile atlas of the Washington D.C. area

In 1981, with Prof. Joseph Wiedel of the University of Maryland, Dr. Pfansiehl created for visually limited and blind people the first tactile and large print atlas of the Washington metropolitan area. With it she produced 11 one-hour taped radio programs, "Washington Neighborhoods: A History of Change", written specifically for blind and low vision listeners -- another first.

First tactile/large print/audio atlas of an entire state

In 1985, again with Prof. Wiedel, she produced for visually limited people the first atlas of an entire state -- Maryland. It includes 41 pages of Braille, raised line and large-print maps with index and descriptions of the geography, demography, and history of Maryland, plus four 90-minute cassettes of verbal information. The project was part of Maryland's 350th anniversary celebration.

The Washington D.C. and Maryland atlases won certificates of merit for "outstanding achievement" from the American Cartographic Association of the American Congress on Surveying and Mapping.

In the mid-70's she served as treasurer and chairman of the Program Planning and Exchange committee of the Association of Radio Reading Services during its founding years.

In 1978 she received the Germaine Montell Activist Award and in 1979 the Myrtle Wreath Achievement Award from the Greater Washington Chapter of Hadassah.

She married Cody Pfansiehl on New Year's Day in 1983. Before retiring in 1982 he had been for 21 years the spokesman for the Metro public transportation rail and bus system. In 1981 he was chosen a "Washingtonian of the Year" by the Washingtonian magazine. In 1982 Dr. Pfansiehl was chosen a Washingtonian of the Year.

As a team, the Pfansiehls accepted the 1983 Communications and Leadership Award from District 36 of Toastmasters International. In 1986 the Pfansiehls were recognized by the D.C. chapter of the Retinitis Pigmentosa Foundation for their services for people who are visually impaired or blind.

(MORE)

With her husband she is a member of the WGBH Descriptive Video Service Advisory Board.

In June, 1987, Dr. Pfanstiehl was one of WJLA-TV's "7 Salutes Seven Who Care" annual honorees.

Talking computers ...

Visually limited since she was a child, Dr. Pfanstiehl writes with a talking computer word processor, carries a small talking braille portable word processor, uses a talking thesaurus, dictionary, and calculator, and reads omnivorously with a small cassette player.

Johns Hopkins, Peabody, University of Maryland

Dr. Pfanstiehl was awarded the Bachelors degree from The Johns Hopkins University with a major in music at the Peabody Conservatory of Music. She was awarded Masters (1966) and Doctorate (1971) degrees in counseling and human development at the Institute for Child Study at the University of Maryland.

She has worked in public schools as a braille resource teacher for blind and visually handicapped children, as a counselor-tutor for Maryland Vocational Rehabilitation, a research associate at an institute concerned with man-machine communications for the visually handicapped, a professional marriage and family counselor at a local church, and consultant to the Montgomery County, Maryland, public school system conducting in-service training workshops for school counselors. She is a former member of the Board of Directors of the Columbia Lighthouse for the Blind.

A resident of the Washington D.C. area since 1940, Margaret Pfanstiehl was born Margaret Woodland on October 10, 1932 in Hilton Village, Virginia. She is the mother of one son and has three grandchildren.

The Pfanstiehls live in Silver Spring, Maryland.

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Curriculum Vitae
Donald J. Evans

Personal

Born in Kansas City, Mo. (1951)
Washington, DC resident since 1965
Three children
Officer and long-standing member of Mycological Association
of Washington
Active in Caldwell Community (Radical-Progressive Christian
community)

Education

Gonzaga College High School
Boston College, Magna cum Laude, B.A., 1973 (Presidential
Scholar, Honors Program, Full Academic Scholarship)
Georgetown University Law Center, J.D., 1977

Professional

Evans & Sill, P.C. (Washington, DC) Principal since 1985 in
boutique telecommunications law firm (formerly McFadden, Evans &
Sill). Emphasis on wireless cable, broadcast licensing and
transactions, cellular radio, radio common carrier and other
commercial mobile radio services, international resale carriers,
FCC formal complaints, administrative hearings, and microwave-based
interexchange carriers. Clients range from GTE Mobilnet/Contel
Cellular to regional SMRs and RCCs to multi-station AM, FM and TV
broadcasters and wireless cable licensees.

Dutton, Kappes & Overman (Washington, DC office of
Indianapolis firm) 1982-1985. Associate in multi-faceted firm
focusing on telecommunications, especially cellular radio.
Involved in initial licensing of top ninety cellular markets,
including major market comparative hearings. Contributed
broadcast, common carrier and wireless cable expertise and client
base to start-up Washington office.

Law Offices of Leo George (Washington, DC) 1977-1982.
Associate in small telecommunications boutique representing
nation's largest wireless cable operator, major and small market
broadcasters, MCI, major interexchange resellers, and air-to-ground
radiotelephone providers.

Co-Chair for three years of Federal Communications Bar
Association Adjudicatory Practice Committee

Author of "Joust in Time", published by ABA Journal and
anthologized in America's Best Legal Humor.

Vita: Barry Jay Cronin, Ph.D.

Barry Cronin is a consultant on Educational Media and Technology. In that capacity he has served on the Technical Advisory Committee for the American Foundation for the Blind and has helped develop online and media applications for such companies as, Addison Wesley Longman Publishers, Nefield Publications and Colliers Multimedia Encyclopedia.

Prior to that Dr. Cronin was Editor, Children and Education, for News Corp/MCI Online Ventures. He developed online information and entertainment for children on the World Wide Web. Before joining New Corp he was Executive Director for Technology at the WGBH Educational Foundation in Boston. Having been at WGBH for 11 years, he was a pioneer in developing closed captioning services for hearing impaired people as well as having created the Descriptive Video Service (DVS) which makes television and movies understandable to blind and visually impaired people and the CPB/WGBH National Center for Accessible Media. He also established the Interactive Technology department at WGBH, developing interactive videodisks and CD-ROMs based on WGBH-produced programs such as NOVA and the American Experience.

Barry has a Ph.D. in communications from the University of Missouri and has held numerous educational positions including Academic Dean for a Boston junior college.